

MULTIFUNCTIONAL OPTICAL DEVICE

Abstract

A multifunctional optical device includes a switch for switching the multifunctional optical device between a mouse mode, a camera mode, and a scanner mode. An optical sensor array having a plurality of optical sensors is used for capturing images and providing image information. A processor is used for receiving the image information from the optical sensor array and generating processed data. The processor generates the processed data by calculating a location address if the multifunctional optical device is in the mouse mode, processes the captured image if the multifunctional optical device is in the camera mode, and combines a set of linear images if the multifunctional optical device is in the scanner mode. An interface port interfaces the multifunctional optical device with a host computer and outputs the processed data from the processor to the host computer.